VPL+ : EMPOWERING STUDENTS AND PRACTITIONERS IN PROGRAMMING COURSES

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VPL+

1 PROJECT GOAL

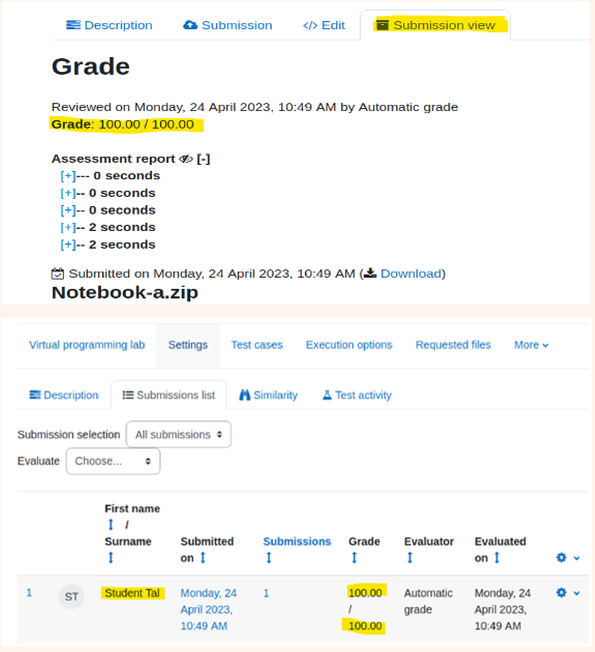
Improve VPL plugin for Moodle to streamline assignment submission and evaluation in computer science courses, benefiting students and practitioners.

2 INTRODUCTION

Enhance assignment submission and evaluation in programming courses for students and practitioners. The existing VPL plugin for Moodle needs improvements to align with computer science degree program needs. This project aims to introduce new features and improve the assignment submission and evaluation experience.

3 METHODS

1. Code Testing and Review: Enhance code quality and assignment performance through testing and refinement on Moodle. Review and iterate on submissions for progress tracking and continual improvement.
2. Automated Grading: Get immediate feedback through an automated grading system that evaluates assignments against predefined tests and criteria. Streamline evaluation and reduce manual grading for efficient and consistent assessment.
3. GitHub Integration: Simplify assignment submission with GitHub repository URLs, leveraging version control for efficient code management.
4. Zip Integration: Submit assignments via zip files alongside GitHub integration, offering flexibility to accommodate diverse workflows based on course requirements and preferences.
5. Flexible Customization: Customize assignments, tests, and execution files in the VPL plugin to align with course requirements and learning objectives.



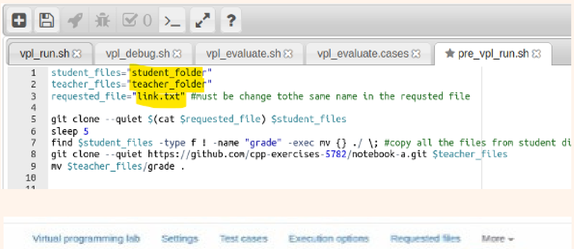
4 SELECTED APPROACH

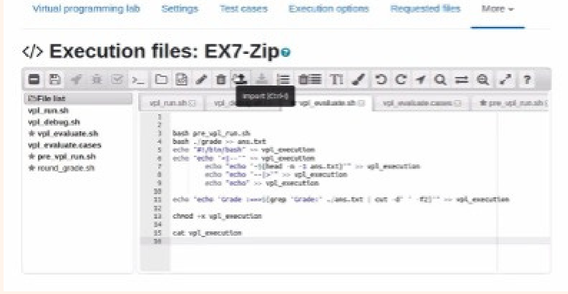
Our approach integrates essential features, allowing students to test code on Moodle, receive timely feedback, and simplify evaluation. With GitHub integration and assignment customization, the learning experience is enhanced through improved submission, evaluation, and grading processes.

5 SOLUTION DESCRIPTION

1. Submission Handling Scripts: Developed scripts allow for seamless assignment submission by providing options to clone projects from GitHub or unzip student submissions. These scripts ensure that students can easily submit their assignments using their preferred method.
2. Evaluation and Grading Scripts: Custom evaluation scripts have been implemented to assess the student's assignment solutions. These scripts execute predefined tests and criteria to evaluate the correctness and quality of the submitted code. The grading scripts calculate the grade based on the evaluation results, providing an automated grading system that saves time for both students and practitioners

With the integration of the custom scripts and the upgraded VPL plugin, the system becomes a powerful tool for students to test their code, review their submissions, and receive prompt feedback, while practitioners can effectively assess and grade assignments with ease.





Link to our GitHub: